



## Material Safety Data Sheet

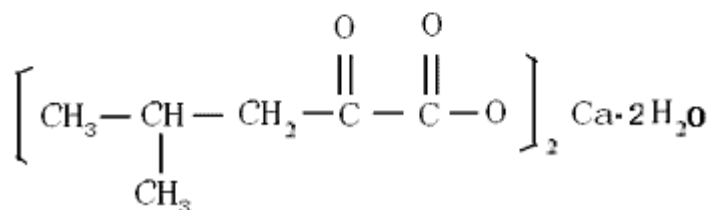
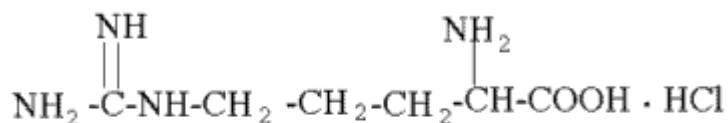
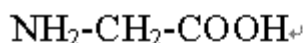
# GAKIC (Glycine-L-Arginine-HCl - Calcium alpha-ketoisocaproate)

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name GAKIC (Glycine-L-Arginine-HCl - Calcium alpha-ketoisocaproate)  
Company information manufacturer  
KAIYUAN HENGTAI CHEMICAL CO., LTD.  
No.18,YiheRoad,Kaiyuan City, Liaoning Province, China 112300  
Tel:+86-410-3711928  
Fax:+86-410-3710986

### SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Name Glycine-L-Arginine-HCl - Calcium alpha-ketoisocaproate  
Molecular formula  $C_{20}H_{42}O_{12}ClN_5Ca$   
Molecular mass 620.12 g/mol  
Structure



### SECTION 3 - HAZARDS IDENTIFICATION

Company add.: No.18, Yihe road, Kaiyuan city, Liaoning province, China 112300

Tel: 86-410-3711928 Fax: 86-410-3710986

Office add.: No.33, Zhaogong North Street, Tiexi, Shenyang, China 110026

Sales Tel:13609818883 Service Tel:86-24-25520802 Techsupport Tel:86-24-25520803 Fax:86-24-25524770

Http://www.hengtaichem.com E-mail: sales@hengtaichem.com



Most important hazards May cause eye and skin irritation. May cause respiratory and digestive tract irritation.  
Target organs: None.

#### SECTION 4 - FIRST AID MEASURES

Eyes Rinse immediately with tap water for at least 15 minutes, open eyelids forbiddingly. Get medical aid immediately.  
Skin Remove immediately contaminated clothes, wash affected skin with water and soap, do not use any solvents  
Inhalation Remove the casualty to fresh air and keep him/her calm.  
Consult physician.  
Notes to physician Treat symptomatically

#### SECTION 5 - FIRE FIGHTING MEASURES

Suitable extinguishing media Water spray jet, dry powder, foam, carbon dioxide  
Specific hazards Consider dust explosion hazard.  
Protection of fire-fighters Precipitate gases/vapors/mists with water spray

#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

Environmental protection Do not allow to enter drains or waterways.  
Methods for cleaning up Collect solids (avoid dust formation) and hand over to waste removal  
Clean contaminated areas with little water

#### SECTION 7 - HANDLING and STORAGE

Handling  
Technical measures processing in closed systems, if possible superposed by inert gas (e.g. nitrogen)  
Local exhaust ventilation necessary  
Take precautionary measures against electrostatic charging  
Avoid dust formation; high dust explosion hazard  
Suitable materials Stainless steel, aluminium, enamel, glass, polyethylene  
When plastics are used, possible electrostatic charges must be

---

Company add.: No.18, Yihe road, Kaiyuan city, Liaoning province, China 112300

Tel: 86-410-3711928 Fax: 86-410-3710986

Office add.: No.33, Zhaogong North Street, Tiexi, Shenyang, China 110026

Sales Tel:13609818883 Service Tel:86-24-25520802 Techsupport Tel:86-24-25520803 Fax:86-24-25524770

Http://www.hengtaichem.com E-mail: sales@hengtaichem.com



---

Considered.

Storage

Storage conditions	Store in a dry place, room temperature
Validity	24 months, room temperature, in the unopened original container. Some items maybe hygroscopic and clump during shipment. This does not effect the efficacy of the product, but just the texture.
Packaging materials	Tightly closing; aerial: stainless steel, glass, aluminium, enamel, polyethylene, plywood (lined with polyethylene bag), cardboard (lined with polyethylene bag)

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering measures	Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
Personal protective equipment	
Respiratory protection	In case of open handling or accidental release: particle mask or respirator with independent air supply
Hand protection	Protective gloves
Eye protection	Safety glasses

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Colour	White
Form	crystalline powder
Odour	Characteristic
Solubility	Slightly soluble in water , insoluble in acetone and ethanol.

SECTION 10 - STABILITY AND REACTIVITY

Conditions to avoid	Incompatible materials
Materials to avoid	strong oxidizing agents

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#: None listed

LD<sub>50</sub>/LC<sub>50</sub>: None listed

Carcinogenicity:

---

Company add.: No.18, Yihe road, Kaiyuan city, Liaoning province, China 112300

Tel: 86-410-3711928 Fax: 86-410-3710986

Office add.: No.33, Zhaogong North Street, Tiexi, Shenyang, China 110026

Sales Tel:13609818883 Service Tel:86-24-25520802 Techsupport Tel:86-24-25520803 Fax:86-24-25524770

Http://www.hengtaichem.com E-mail: sales@hengtaichem.com



Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA

SECTION 12 - ECOLOGICAL INFORMATION

Inherent biodegradability	None listed
Ecotoxicity	None listed
Air pollution	Observe local/national regulations

SECTION 13 - DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

SECTION 14 - TRANSPORT INFORMATION

Note Not classified by transport regulations

SECTION 15 - REGULATORY INFORMATION

No data

SECTION 16 - ADDITIONAL INFORMATION

Use	Sports nutritions, nutritional supplement
MSDS creating date:	31/01/2008

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.



Company add.: No.18, Yihe road, Kaiyuan city, Liaoning province, China 112300

Tel: 86-410-3711928 Fax: 86-410-3710986

Office add.: No.33, Zhaogong North Street, Tiexi, Shenyang, China 110026

Sales Tel:13609818883 Service Tel:86-24-25520802 Techsupport Tel:86-24-25520803 Fax:86-24-25524770

Http://www.hengtaichem.com E-mail: sales@hengtaichem.com